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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/627,623	07/28/2003	Reuven Unger	P23593	4331
7055 7590 10/22/2007 GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE RESTON, VA 20191			EXAMINER GARCIA, ERNESTO	
			ART UNIT 3679	PAPER NUMBER
			NOTIFICATION DATE 10/22/2007	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

gbpatent@gbpatent.com  
pto@gbpatent.com

<b>Office Action Summary</b>	Application No. 10/627,623	Applicant(s) UNGER ET AL.	
	Examiner Ernesto Garcia	Art Unit 3679	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 September 2007 and 22 August 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3-5,7-10,12-14 and 25-33 is/are pending in the application.
- 4a) Of the above claim(s) 4,8,13,25,29 and 33 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,5,7-10,12,14,26-28 and 30-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 August 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on August 22, 2007 has been entered.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### ***Election of Species***

Claims 4, 8, 13, 25, 29, and 33, are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on January 3, 2007.

### ***Drawings***

The drawings were received on August 22, 2007. These drawings are acceptable; however, the drawings contain a few discrepancies.

The drawings are objected to because the cross hatching of the rod 320 in Figures 1 and 3 should be shown for metal since the current cross hatching makes unclear to what material the cross hatching corresponds according to MPEP 680.02(IX).

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended". If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the examiner does not accept the changes, the

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applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

Claims 3, 7, 10, 12, 14, 28, and 32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 3, 7, and 12, the recitation “a first thread is formed on an inner periphery of a portion of the first inner diameter” in lines 1-2 is misdescriptive and/or inaccurate. Since the bottom of the thread actually forms the first diameter as shown in Figure 3, a thread cannot be formed at the same inner diameter. According to Figure 3, the bottom of the thread forms the first inner diameter.

Regarding claim 10, the metes and bounds of the claim is unclear. The language “consisting of” in line 6 conflicts with “having” in line 5 or otherwise renders the scope unclear. Since “having” in line 5 is an open-ended clause, the language does not preclude other diameters from being recited. The language after “consisting” merely serves to labels the diameters accordingly and does not preclude other diameters.

Regarding claims 14, 28, and 32, the claims depend from claim 10 and therefore are indefinite.

***Claim Rejections - 35 USC § 102***

Claims 1, 26, and 30 are rejected under 35 U.S.C. 102(b) as being anticipated by Bauer, 3,648,999.

Regarding claim 1, Bauer discloses, in Figure 1, a securing device comprising a spring **15**, a rod **18**, a generally annular spring support **12** and a generally annular coupling ring **A1** (see marked-up attachment). The spring **15** supports the rod **18** at a central portion of the spring and biases the rod **18**. The spring support **12** includes a spring mount **A2** projecting in an inner side of the spring support **12**. An outer peripheral portion of the spring **15** is prevented from movement by the spring support **12** and the coupling ring. The spring support **12** has a first inner diameter **A5** (see marked-up attachment), a second inner diameter **A6**, and a third inner diameter **A7** in this order. The third inner diameter **A7** is smaller than the second inner diameter **A6**. The spring mount **A2** is positioned at a region of the spring support **12** located between the second inner diameter **A6** and the third inner diameter **A7**.

Regarding claim 26, the spring support **12** and the coupling ring **A1** clamp the outer peripheral portion of the spring **15** therebetween.

Regarding claim 30, the spring **15** is secured to the rod **18**.

Claims 1, 3, 26, and 30 are rejected under 35 U.S.C. 102(b) as being anticipated by Philips et al., 2,896,447.

Regarding claim 1, Phillips et al. disclose, in Figure 1, a securing device comprising a spring **3**, a rod **1**, a generally annular spring support **4** and a generally annular coupling ring **9**. The spring **3** supports the rod **1** at a central portion of the spring **3** and biases the rod **1**. The spring support **4** includes a spring mount **A2** (see marked-up attachment) projecting in an inner side of the spring support **4**. An outer peripheral portion of the spring **3** is prevented from movement by the spring support **4** and the coupling ring **9**. The spring support **4** has a first inner diameter **A5** (see marked-up attachment), a second inner diameter **A6**, and a third inner diameter **A7** in this order. The third diameter **A7** is smaller than the second inner diameter **A6**. The spring mount **A2** positioned at a region of the spring support **4** located between the second inner diameter **A6** and the third inner diameter **A7**.

Regarding claim 3, a first thread is formed on an inner periphery of a portion of the first inner diameter **A5**, and a second thread is formed on an outer periphery of the coupling ring **9**. The first thread and the second thread threadably engage each other.

Regarding claim 26, the spring support **4** and the coupling ring **9** clamp the outer peripheral portion of the spring **3** therebetween.

Regarding claim 30, the spring **6** is secured to the rod **1**.

***Claim Rejections - 35 USC § 103***

Claims 5, 7, 9, 27, and 31 are rejected under 35 U.S.C. 102(b) as being anticipated by Cox et al., 2,753,544, in view of Petty, 2,348,225.

Regarding claim 5, Cox et al. discloses, in Figure 1, a securing device comprising a spring **24**, a rod **14**, a generally annular spring support **11**, and a generally annular coupling ring **36**. The spring **24** supports the rod **14** at a central portion of the spring **24** and biases the rod as the rod **14** elastically moves back and forth. Applicants should note that the spring **24** is able to support a rod such that the rod elastically moves back and forth. The spring support **11** includes a spring mount (the shoulder) projecting in an inner side of the spring support **11**. The spring support **11** has a second inner diameter **A6** (see marked-up attachment), a third inner diameter **A7**. The third inner diameter **A7** is smaller than the second inner diameter **A6**. The spring mount is positioned at a region of the spring support located between the second inner diameter **A6** and the second inner diameter **A7**; however, Cox et al. fails to disclose a first inner diameter thus providing for an order of three diameters. Petty teaches, in Figure 1, a first inner



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diameter to hold a spring **21** with a threaded annular coupling ring **31**. Note that creating a thread to fix a threaded annular coupling ring will result three inner diameters in Cox et al. since the valley of the thread will provide for a first inner diameter to the spring support. Therefore, as taught by Petty, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a first inner diameter formed by a thread to use an annular coupling ring that is to be threaded to the spring support instead of being fixed with a screw as taught in Cox et al.

Given the replacement of the ring of Cox et al. with that of Petty, fixation holes **34** would have extended through the coupling ring **3** (col. 4, lines 16-22). Note that the fixation holes facilitate connection of the spring support to the coupling ring, and the coupling ring **36** is configured to connect to the spring support.

Regarding claim, 7, given the modification, a first thread would have been formed on an inner periphery of a portion of the first inner diameter, and second thread would have been formed on an outer periphery of the coupling ring to threadably engage with the first thread.

Regarding claim 9, the fixation holes are at an interval of one of approximately 90 degrees and 180 degrees on the coupling ring (note that 120 degrees is shown for the holes of the spring in Figure 3 and is approximately 90 degrees).

Regarding claim 27, the spring support **11** and the coupling ring **36** clamp the outer peripheral portion of the spring **24** therebetween.

Regarding claim 31, the spring **24** is secured to the rod **14**.

Claims 10, 12, 14, 28, and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Petty, 2,348,225, in view of Muellenberg, 5,067,847.

Regarding claim 10, Petty discloses, in Figure 1, a securing device comprising a spring **21**, a rod **27**, a generally annular spring support **10**, and a generally annular coupling ring **31**. The spring support **10** includes a spring mount **30** projecting in an inner side of the spring support **10** and configured to support the spring **21**. The spring support **12** has three inner diameters consisting of, in this order, a first inner diameter **A5**, a second inner diameter **A6**, and a third inner diameter **A7** that is smaller than the second inner diameter **A7**. The spring mount **10** is positioned at a region of the spring support **10** located between the second inner diameter **A5** and the third inner diameter **A7**. Holes **34** are in the coupling ring **31**. However, Petty fails to disclose the holes **34** being threaded. Muellenberg teaches between Figures 1 and 3, holes **29** that are not threaded and holes that are threaded **9** to place withdrawal screws and release a ring in a threaded opening (col. 4, lines 13-17, and col. 5, lines 1-6). Therefore, as taught by Muellenberg, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use threaded holes to place withdrawal screws to release the

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connection between the ring and the spring support. Note that the same withdrawal screws can be used to fasten.

Regarding claim 12, a first thread is formed on an inner periphery of a portion of the first inner diameter A5. A second thread is formed on an outer periphery of the coupling ring 31. The first thread and the second thread engage each other.

Regarding claim 14, the threaded holes 34, as modified, are at an interval of approximately 90 degrees or 180 degrees on the coupling ring 31.

Regarding claim 28, the spring support 10 and the coupling ring 31 clamp the outer peripheral portion of the spring 21 therebetween.

Regarding claim 32, the spring 21 is secured to the rod 27.

### ***Response to Arguments***

Applicant's arguments filed August 22, 2007 have been fully considered but they are not persuasive.

With respect to Bauer, applicant argues that Bauer discloses two inner diameters, and that the Examiner's identified "third" inner diameter A7 is the same as the first diameter A5. In response, it should be noted that the spring mount is the entire

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housing which includes three inner diameters as a whole. With respect to inner diameter A7 being the same as the first diameter A5, it should be noted that the claim does not establish that the first and third diameter have to be different in size. The claim merely establishes that the third diameter is smaller than the second diameter and nothing else.

With respect to Petty, applicant argues that Petty only discloses two inner diameters A5 and A6 and that the examiner identified 'third' inner diameter A7 is that of the Examiner's identified spring mount 30. This is not found persuasive since the spring support is made up of components 10 and 30 together and such contains three diameters as identified. The fact that component 30 is spaced away is moot since Petty discloses at column 4, lines 30-33, the component 30 being close to component 10 thus no clearance will exist. Accordingly, the spring support will contain a spring mount and be positioned between the second diameter and the third diameter. With respect to the argument made to the language "consisting of", note the 35 USC 112, 2<sup>nd</sup> paragraph rejection.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ernesto Garcia whose telephone number is 571-272-7083. The examiner can normally be reached from 9:30AM-6:00PM. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached at 571-272-7087.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*E.G.*



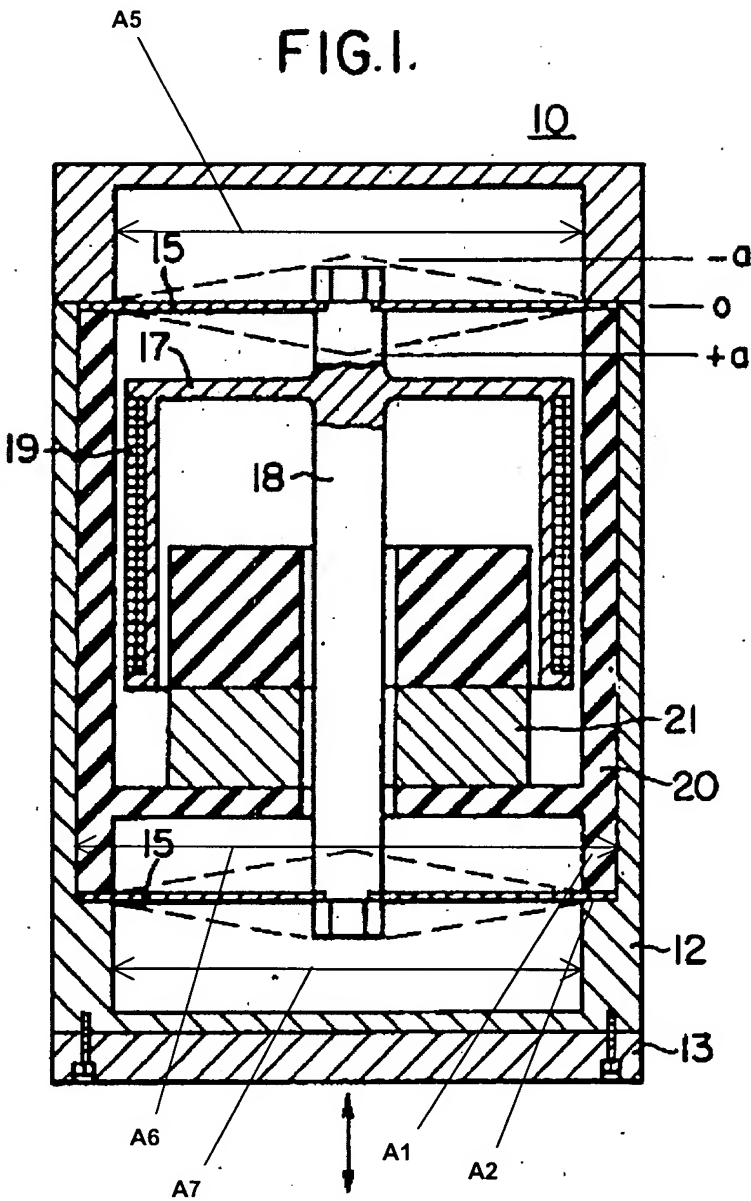
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October 1, 2007

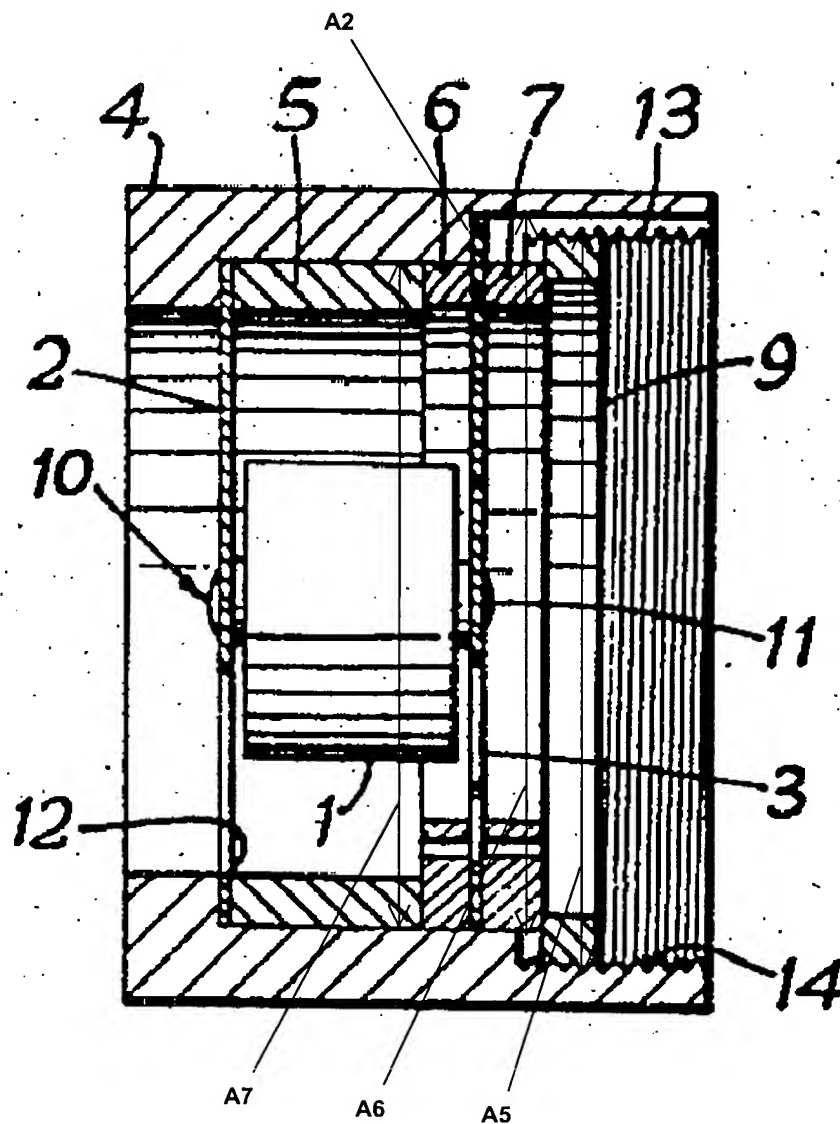
Attachments: one marked-up page of Bauer, 3,648,999  
one marked-up page of Phillips et al., 2,896,447  
one marked-up page of Cox et al., 2,753,544  
one marked-up page of Petty, 2,348,225

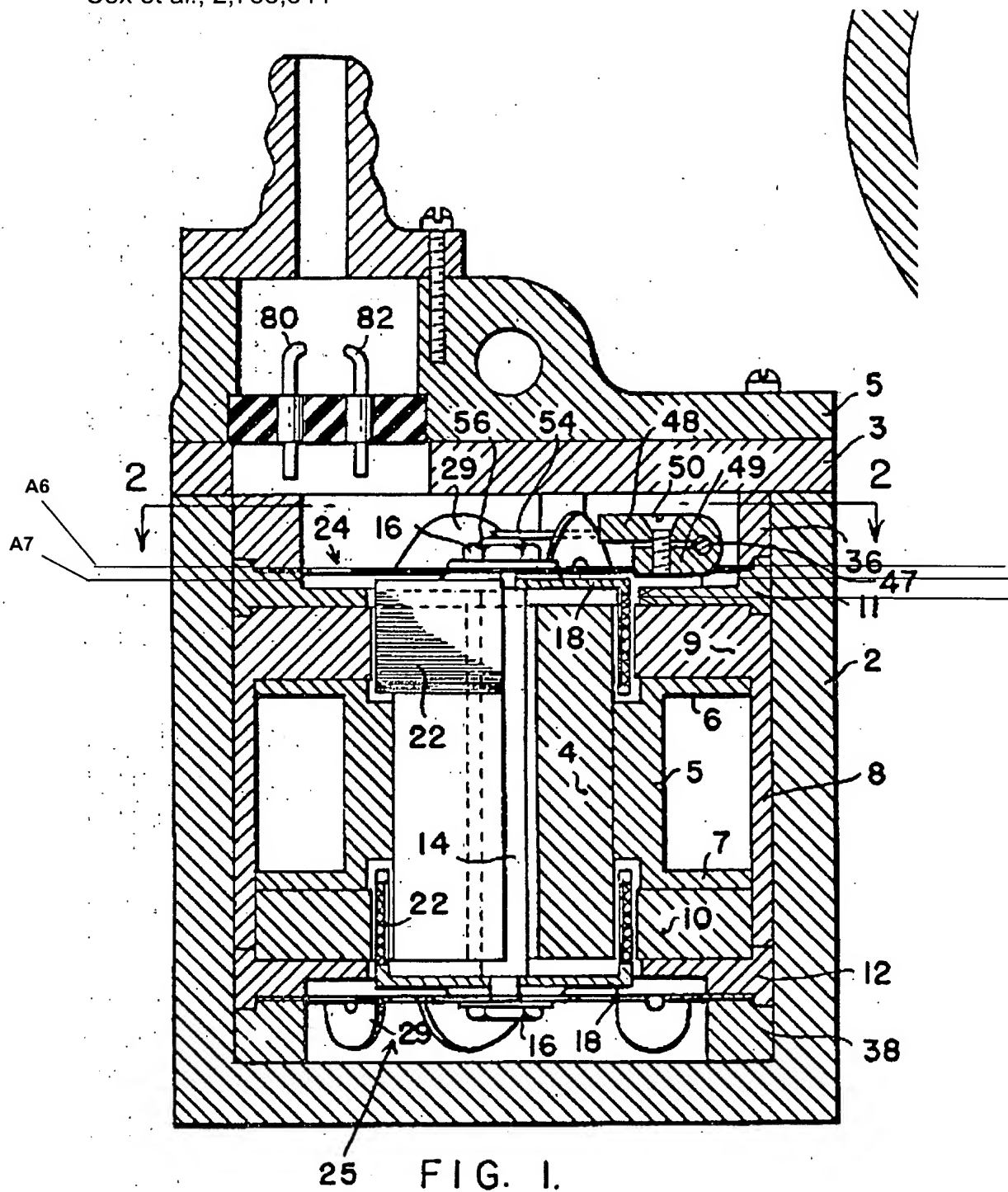
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Bauer, 3,648,999



*Fig. 1.*







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Petty, 2,348,225

